

JPRS-JAR-85-020

13 September 1985

# Japan Report

**FBIS** FOREIGN BROADCAST INFORMATION SERVICE

#### NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

13 September 1985

## JAPAN REPORT

### CONTENTS

#### POLITICAL AND SOCIOLOGICAL

- Future of Komoto, Komoto Faction Discussed  
(Ichiro Nagata; ZAIKAI, 30 Jul 85)..... 1

#### MILITARY

- Government, LDP To Meet on Defense Ceiling  
(KYODO, 19 Aug 85)..... 8

#### ECONOMIC

- Business Views of Technological Revolution Surveyed  
(KEIZAI KIKAKUCHO NI YOUR ANKEETO, 17 Apr 85)..... 9
- Higher Import of Oil, Coal Urged  
(KYODO, 2 Aug 85)..... 49

## POLITICAL AND SOCIOLOGICAL

### FUTURE OF KOMOTO, KOMOTO FACTION DISCUSSED

Tokyo ZAIKAI in Japanese 30 Jul 85 pp 100-103

[Article by Ichiro Nagata]

[Text] Unpleasant General Meeting

"I do not believe that he will always remain a party presidential candidate. Isn't it about time that we reconsidered the future course of this faction?"

The occasion was the general meeting of the Komoto faction held on 26 June, the day after the close of the ordinary Diet session. The above remark was made by a faction member in the presence of the "presidential candidate" Toshio Komoto (state minister) and created quite a shock within the faction.

"Actually, that thought is in the mind of every member. However, I did not think that it would have surfaced in this manner." A faction leader explained that this is how the members reacted in general.

Although everyone was thinking along the same line, no one voiced concurrence with the remark at the meeting.

It is said that the general meeting adjourned "with quite an unpleasant feeling," according to a Diet member of the faction.

Toshio Komoto ran in the past two presidential primary elections and had firmly established his base as a presidential candidate.

However, the situation had changed drastically with the reelection and assumption of governmental powers by his rival, Yasuhiro Nakasone.

Will the Komoto faction continue to support Komoto and strive to attain political authority or will it lower its banner for a political regime and seek a new course as a middle-of-the-road faction, or worse yet, will it become the "grazing ground" for other factions and vanish into thin air? The faction is standing at a crucial crossroads.

Komoto has been treated as a deputy prime minister in the Nakasone cabinet since the reelection.



During Nakasone's travels abroad, he always serves as a temporary, acting prime minister.

Within the cabinet, he is noted for his aggressive statements centered on economic policies.

After assuming his office, Komoto issued premier-like instructions, e.g., with regard to famine measures for Africa, he stated, "to determine if Japan's aid is truly helping those countries, a follow-up system should be established with the cabinet secretary taking the lead." Even Nakasone, who yields to no one as an attention-getter, was outdone on this occasion.

His statements on increasing domestic demand and reducing taxes are fresh in the people's minds.

At Nakasone's cabinet meetings, where there are hardly any arguments to speak of, Komoto's aggressiveness has been creating conversational topics of some kind.

#### Mechanism to Crush Komoto

However, in spite of these "strenuous efforts" in the cabinet, "presidential candidate" Komoto is facing tragedy in his personal future.

On the occasion of Nakasone's reelection, "The fact that he could not strike a resisting blow irrevocably weakened his position as a presidential candidate." (Statement of a Komoto faction Diet member.)

Kiichi Miyazawa and Shintaro Abe garnered one of the top three party posts or an important cabinet position, while showing signs of contesting, but in contrast, Komoto did not voice any opposition till the end.

When the cabinet was formed, Komoto requested the position of either party vice president or deputy prime minister but Nakasone completely disregarded him.

Nakasone's mind was preoccupied with the problem of how to deal with and dispose of the new leaders, namely, Miyazawa, Abe and Noboru Takeshita. In other words, Nakasone did not take his former rival, Komoto, very seriously.

Komoto's weakest point is that his Diet factional force totals only 35 persons, including Upper and Lower House members, and he does not have the minimum 50 recommenders required to run in presidential primary elections.

Although in a sidestream faction, Komoto showed keen enthusiasm that "the primary election system is the road to political power," and utilizing his abundant financial resources, staged a tremendous campaign to solicit party members and supporters.

As everyone is aware, there was a time when others, like Nakasone, could not even closely match the number of Diet members he had recruited.

That was the period when Komoto was close to establishing his own political regime.

A minimum of 50 recommenders (Diet members) will be required to run as a candidate in the presidential primary election--that revision of the regulation was devised to crush Komoto by the mainstream factions, which feared Komoto's strength.

This mechanism had a decisive effect on Komoto.

The emergence of Vice President Nikaido, as the central figure to rally anti-Nakasone forces, has also been a blow to Komoto.

Former Prime Minister Fukuda, who championed the cause of Komoto 2 and 1/2 years ago--"Mr. Komoto, become the leader to save this country"--does not even mention the name of Komoto today.

"If Nakasone is to be put in a bind, the person to use is Nikaido, not Komoto," This is probably what Fukuda is thinking.

Even the middle-of-the-road parties, which attempted a number of times in the past to approach Komoto, are now saying that, "we no longer have interest in Komoto or Fukuda." (Statement of Democratic Socialist Party leader.)

On the other hand, since Kanemaru became the party's pivotal figure as its secretary general, support for new leaders, such as Abe and Takeshita, has intensified rapidly.

Basically, Kanemaru does not have such bad relationships with Komoto.

There was a delicate period in the past when Kanemaru began to support Komoto against the wishes of former Prime Minister Tanaka.

Kanemaru, who had disliked Nakasone, had thought that "Komoto was better than Nakasone."

However, Kanemaru is now the main pillar supporting Nakasone and his earnest wish in the realization of a new leader's political regime.

As the owner of the Sanko Steamship Co, Komoto distinguished himself in the Miki faction with his ample financial resources and succeeded as the faction leader.

However, his rationalism as a financier hurt him in the political world of "duty and humanity." Even at social parties, Komoto talked with absurd seriousness about economic matters and withdrew alone saying, "I have to leave now."

"He is a man of consequence. If he were in our faction, he would have assumed political power." Even some in the rival Tanaka faction say that but it cannot be denied that he lacks magnetism as a political boss.

There is some dissatisfaction in the party that, "he will do what is ordinarily expected but nothing more." (Statement of a Komoto faction Diet member.)

Because his personal ties are few, his "centripetal power" in the faction is weak.

#### Together With the Decline of Sanko

Komoto's political position has weakened together with the decline of the Sanko Steamship Co of which Komoto is the actual owner.

With the deterioration of the shipping business following the oil shocks, the performance of the Sanko Steamship Co worsened and showed deficits of 47 billion yen in March 1983 and 55 billion yen in March 1985 and the cumulative deficits climbed to the enormous sum of 168.2 billion yen in the March settlement term of this year.

Komoto withdrew from the operations of Sanko Steamship and took the position that, "since I possess only 3.3 percent of the total shares, Sanko Steamship and the Komoto faction have no relationship."

However, everyone knows that the "high-priced Sanko stock" had financed Komoto faction's predecessor, the Miki faction.

Sanko Steamship supports Komoto's political activities and is the lifeline of the Komoto faction.

Supporting Sanko Steamship are three principal banks, namely, Daiwan Bank, Ltd, the main bank, Long-Term Credit Bank of Japan, Ltd and Tokai Bank, Ltd.

Views are being expressed that as long as Komoto remains a state minister, accorded the treatment of a deputy prime minister, and Tokuo Yamashita, a faction member, is the transport minister, the situation will remain the same but should the two leave the cabinet in the fall reorganization, what moves the banks will take at that time will be the crucial issue. On 15 May, Komoto took along Yamashita to meet with Ryuichi Kato, president of Tokai Bank, and requested assistance but this act aroused criticisms of "abusive use of authority."

That he took such an action, while repeating that "politician Komoto and Sanko Steamship have no relations," reminds one of the label, "politically tone deaf," pinned on Komoto but probably it would be more correct to say that the situation is so critical that he could not care for outward appearances.

This incident had repercussions in the faction where talk of Sanko's financial difficulties is taboo.



At the Komoto faction's general meeting on 5 June, Setsu Shiga, the faction's deputy secretariat chief, countered the criticism and supported Yamashita by saying, "What is wrong about the transport minister trying to rescue a shipping company?"

However, since the faction had followed in the footsteps of "Clean Miki" and had capitalized on "clean politics," there are some in the faction who criticize that "after all, wasn't that a foolish act?"

A big factor that enabled Komoto to maintain his position as a presidential candidate was his powerful financial power backed by Sanko.

Sanko Steamship's impasse is crumbling, from a financial standpoint, Komoto's foothold as a presidential candidate.

Naturally, the watchful eyes of other factions are directed at the wavering Komoto faction.

"The Komoto faction will break up."

"The Komoto faction will sell out."

Such rumors have arisen and quieted, time and time again, in Nagata-cho since this year.

#### Movements of Kaifu Group

When the Soseikai was formed by Noboru Takeshita, Toshiki Kaifu of the Komoto faction responded as though in agreement.

Kaifu was said to be Miki's favorite disciple but in the Tanaka cabinet, he served as the chairman of the Standing Committee on House Management and has been close to the Tanaka faction since then. In the Komoto faction, he is one of the few Dietmen who can maneuver behind the scenes. Kanemaru, who had been saying, "he is too good a man to leave in Komoto faction," appointed Kaifu as the leading assistant secretary general upon assuming the office of LDP secretary general.

He has close ties with the Waseda Debating Society and is an overt supporter of Takeshita.

It has been persistently rumored that if Takeshita had to leave the Tanaka faction because of the formation of Soseikai, Kaifu had planned to muster forces from the Komoto faction and join Takeshita.

It is said that the Kaifu group consists of five or six persons, mostly young members.

Since the Soseikai has remained in the Tanaka faction, Kaifu is keeping his silence. Recently, Kaifu has been saying that, "Especially, at this critical juncture, I would like to see Komoto, who has been consistently



advocating aggressive finances and political ethics, take the helm of government."

However, Kaifu is still a "partisan" of the Soseikai.

Kanemaru and Takeshita are not the only ones trying to woo the Komoto faction.

Leaders of the Nakasone faction stated in early spring that, "Both the Nakasone and Komoto factions stem from the same, former Progressive Party. If we consolidate, we would have a hundred members. Since the Tanaka faction is on the verge of splitting, we might become the biggest faction in the party." These statements have created a stir in various sectors.

It is even said that the Sanko stocks rose temporarily because of these statements.

There are schemes, also, to amalgamate the Fukuda and Komoto factions.

The visit by Fukuda to Miki's residence in Nanpeidai in late February aroused various conjectures but aside from that, Komoto sought Fukuda's assistance in rescuing Sanko and Fukuda cooperated with monetary support.

Because of this, the mood strengthened in Komoto faction for consolidation with the Fukuda faction but Kaifu, who has a strong pipeline to Kanemaru and Takeshita, objected and the plan is still up in the air.

Within the Tanaka faction, not only the Kanemaru-Takeshita group but the former Prime Minister Tanaka's group, and even Tanaka himself before succumbing to a cerebral thrombosis, tried to win over pro-Tanaka Diet members in the Komoto faction.

Even the Suzuki faction is showing signs of trying to deepen contacts with the leaders of Komoto faction.

The "dissolution" and "sell-out" of the Komoto faction are being rumored and the faction is facing the crisis of becoming a "grazing ground" because it is viewed that, "the prospect of a Komoto regime has completely disappeared." (Statement of a Suzuki faction Diet member.)

Amidst the faction's commotion, Hyozuki Kujiraoka, a faction member, stated at a supporters' club that, "Our faction has been a traditional, idealistic group since the Miki faction and it is absolutely untrue that the faction's spirit is depressed. With only 35 colleagues, we are few in number but we should stand united and with pride." However, ties once loosened are difficult to reunite.

#### Epicenter of Six Weak Factions Period

People are beginning to say that, "the Komoto faction is already collapsing," but is there any way out for Komoto?

"Tanaka's hospitalization has thrown the political world into a chaos."

This is how Komoto describes "the political world without Tanaka." For taciturn Komoto to reveal his political views openly is unusual.

He also adds, "Therefore, a small group of 35 persons can become a powerful force."

The LDP party line-up of one strong and four weak factions is about to enter a period of six weak factions because of the virtual split of the Tanaka faction. Though only 35 persons, the faction might hold the decisive votes in a political situation.

With regard to trade frictions, which is a serious problem for Nakasone, Komoto is urging a policy change: "In addition to market liberalization, domestic demand must be increased through large-scale tax reductions and easing of regulations, based on drastic revisions of the tax system, before this problem can be solved."

Without question, this is his pet theory but he also wanted to highlight differences with Nakasone's policies.

A certain Komoto faction Dietman says, "Of the post-Nakasone candidates, only Komoto has a vision."

It is true that the new leaders have no political policies. By comparison, Komoto can propose a firm theory, at least, in financial matters.

If Komoto can be said to have any chance at the premiership, it would probably be to relieve Nakasone, should he come to a complete standstill in fiscal management, just as Takeo Miki became the prime minister/party president on the single issue of political ethics.

In this fall's personnel reorganization, it appears that Komoto will be faced with a difficult situation.

The Komoto faction is allotted two cabinet positions. If Komoto remains in the cabinet, there would be only one other opening.

There is fear that dissatisfaction will erupt in the faction. Should he leave the cabinet to pacify his faction, his political presence will soon be eclipsed.

How will Komoto react to the remark that, "eventually, the Komoto faction will be absorbed by the three factions of Tanaka (Soseikai), Fukuda and Suzuki?" (Statement of a Suzuki faction Diet member.)

"Following the Tanaka faction, the Komoto faction will become the epicenter." (Statement of a political reporter.) It is a fact that attention will be riveted to the Komoto faction.

9134

CSO: 4105/354

## MILITARY

### GOVERNMENT, LDP TO MEET ON DEFENSE CEILING

OW191347 Tokyo KYODO in English 1158 GMT 19 Aug 85

**[Text]** Tokyo, Aug 19 KYODO -- Meetings on the next five-year defense buildup program and the question of raising the limit on Japan's defense spending of 1 percent of gross national product (GNP) will take place this week to ratify opinions between the government and the Ruling Liberal-Democratic Party (LDP), government officials said Monday.

A meeting of the National Defense Council, formed by four cabinet ministers as well as Prime Minister Yasuhiro Nakasone, will be held on Tuesday.

Chief cabinet secretary Takao Fujinami and Koichi Kato, director general of the defense agency, will then discuss the controversial issue with LDP vice president Susumu Nikaide Wednesday, the officials said.

In the National Defense Council meeting, Foreign Minister Shintaro Abe is expected to reiterate his call for prudent handling of the issue, according to the officials, because he believes Japan's increases in defense expenditure and moves toward lifting of the ceiling cause concern among Asian countries.

Ippei Kaneko, director general of the economic planning agency, will report on the nation's economic prospects and the estimate of GNP over the five years, to be prepared by November.

The defense agency said earlier this month that the cost of the next five-year defense buildup plan would go over 1 percent of GNP in the period.

Nakasone has indicated that the government will handle the issue based on the plan by the defense agency. He has also said that the lifting of the ceiling on the defense budget could be postponed until December when next fiscal year's budget is worked out.

The defense council will approve the defense budget for 1986 in a meeting scheduled for the end of August, the officials said.

CSO: 4100/717

## ECONOMIC

### BUSINESS VIEWS OF TECHNOLOGICAL REVOLUTION SURVEYED

Tokyo KEIZAI KIKAKUCHO NI YORU ANKEETO in Japanese 17 Apr 85 pp 1-12

[Text] Business Investment Activities To Meet the Technological Revolution  
Opinion Survey of Business Activities

Survey Bureau, Economic Planning Agency, 17 April 1985

This report puts together the results of a survey conducted, along the lines of the outline below, to grasp the latest awareness and activities of business, especially capital investment activities, in dealing with the advance of the technological revolution.

#### A. Subjects of the Survey

1,623 companies (financial and insurance companies excluded) out of the 1st and 2d tier companies listed on the Tokyo, Osaka, and Nagoya stock exchanges

#### B. Period of the Survey

January 1985

#### C. Method of the Survey

Self-prepared response to survey sent by mail

#### D. Sections of the Survey

1. Future Economic Growth Rate, Demand Forecast, Business Environment
2. Technological Revolution and Capital Investment Activities
3. Trend of Direct Investment Overseas

#### E. Effective Response Rate

Number of firms responding: 1,158; Effective Response Rate: 71 percent



## Summary of Survey Results

### I. Future Economic Growth Rate, Demand Forecast, Business Environment

#### (Economic Growth Rate Forecast)

#### 1. Real Economic Growth Rate of 4.7 Percent Expected for 1985

If we look at what sort of future economic growth pattern the firms estimate for the Japanese economy, we find that, with regard to the real economic growth rate for 1985, 70 percent of the firms predict 4 percent growth, and just over 20 percent expect 5 percent growth. Put together, about 90 percent of the firms expect growth of around 4-5 percent. The average came to 4.7 percent.

Furthermore, the growth rates that the companies expected for the next 3 years up to 1987 and the next 5 years up to 1989 were 4.5 percent and 4.4 percent, respectively. This medium term expected growth rate is slightly under the expected growth rate for 1985, but it is 0.2 points above that of the previous survey (January 1983).

#### (Growth Rate Forecasts of Business Demand)

#### 2. Growth Rate Forecasts of Business Demand Differ Considerably by Industry

When it came to the future trend of business demand, the companies set down more moderate forecasts than their predictions of the macroeconomic growth rate. Moreover, considerable variance appeared according to the industry queried. The real growth rate estimate of business demand for 1985 was an average of 4.2 percent across all industries, but when looking at this from the standpoint of individual industries, the variance was quite great, ranging from 8 percent for the electric equipment industry to 1 percent for the oil and coal, and shipbuilding industries. In general, the demand estimates of the processed manufactured goods industries (see note) were high. Business demand for the next 3 years and the next 5 years is forecast to be an average of 4.1 percent across all industries. In this medium term business demand forecast as well, the variance among individual industries is virtually similar to the 1985 forecast.

Note: Raw materials industries: textiles, pulp and paper, chemicals (organic and inorganic), steel, nonferrous metals  
Processing industries: general machines, electric equipment, transporting equipment, precision equipment  
Other manufacturing industries: food products, chemicals (pharmaceuticals, etc.), oil and coal, rubber, ceramics and earthenware, metal goods, miscellaneous manufacturing industries

## (Business Environment)

### 3. Companies, in General, Concerned Over Trend of Domestic Demand

When we look at what sort of concerns the companies have with the current business environment as the economy continues its steady expansion, we find that over 80 percent of the firms answered that the trend of "domestic demand" was their prime concern. Many companies also had serious concerns about "business competition," "the price of manufactured goods," and "the overseas economy (demand)." In terms of individual industries, the industries greatly effected by market conditions, such as pulp and paper, oil and coal, non-ferrous metals, and shipbuilding, indicated a high degree of concern about "the price of manufactured products." The metals goods, general machine, shipbuilding, and trading industries expressed concern over "business competition." Processing industries where the tempo of technological progress is fast, such as the electric equipment, automobile and automobile parts, and precision equipment industries, expressed great concern over "technological trends." The construction industry was worried about "public service investment." Moreover, the responses of the automobile and automobile parts and electrical equipment (light electrical equipment), and steel industries indicated anxiety over "trade friction and protectionist pressures."

### 4. Medium- and Long-Term Concern Over the Arrival of the Information Society and the Old Age Society

With regard to the medium- and long-term business environment, the greatest concern is also over "domestic demand." Moreover, a greater degree of concern than that at present is shown for "technological trends," "the transformation into a high information economic society," "the progress of transformation into an aging society," "pursuit by the industrializing countries," and "the diversification of values." In particular, the processing industries ranked "technological trends" as their primary concern. In addition, one-third of the firms were concerned about "the transformation into a high information economic society" and "the progress of transformation into an aging society."

## II. Technological Revolution and Capital Investment Activities

### (Medium-Term Forecast for Capital Investment)

### 5. Over Half the Firms to Invest Above 5 Percent; Electrical Equipment and Precision Equipment Firms Are Most Positive

Looking at the medium-term trend of capital investment, we find that, in the midst of a technological revolution, over 50 percent of the firms expect to "increase" (more than 5 percent annually at a nominal rate) their capital investment over the next 3 years through 1987. Over 40 percent plan to remain "practically the same" (above -5 percent but less than +5 percent). As for individual industries, 70 percent of the companies in the electric equipment, pulp and paper, ceramics and earthenware, and precision equipment industries

expect an "increase." In general, the manufacturing industries, and in particular, the processing industries, contain many firms predicting an "increase." Around one-third of the electric equipment and precision equipment companies are forecasting a "large increase" (above 10 percent).

(Priorities of Capital Investment)

6. Greatest Priorities Are Reduced Labor and Increased Efficiency

As far as the priority areas of capital investment over the next 3 years are concerned, over 70 percent of the firms raised "reduced labor and increased efficiency." The manufacturing industries are also emphasizing "advances into new products and new fields," and the nonmanufacturing industries are emphasizing "innovations in plant and equipment." Moreover, over half of the firms in the processing industries are placing emphasis on "research and development."

(Factors for Deciding To Go Ahead With Capital Investment)

7. Eighty Percent of the Processing Industry Firms Said To Meet the Challenge of the Technological Revolution

As for the factors that companies are paying attention to when making capital investments, the manufacturing industry, over the past 3 years, has given the most weight to "the manufactured products demand forecast," "response to technological innovation," and "level of earnings." The nonmanufacturing industries have given the greatest weight to "the operational condition of existing equipment," "level of earnings," and "maintenance and expansion of market share." With regard to the next 3 years, the manufacturing industry, generally speaking, is paying the closest attention to "the operational condition of existing equipment," but in contrast with the past, attention to "response to technological innovation" and "expected earnings rate of the investment" is increasing. In particular, about 80 percent of the firms in the processing industries raised "response to technological innovation" as a basic factor for investment. The nonmanufacturing industries are stressing "maintenance and expansion of market share," "level of earnings," and "operational condition of existing equipment" for the future.

(Deterioration and Obsolescence of Equipment)

8. Deterioration and Obsolescence Move Forward in Over Half the Firms

Close to 60 percent of the firms stated that the deterioration of plant and equipment was "progressing" faster than 5 years ago. Deterioration in the raw materials industries, such as pulp and paper, nonferrous metals, and chemicals (organic and inorganic) was particularly noteworthy. On the other hand, the degree of deterioration in the electric equipment, chemical (pharmaceuticals, etc.), precision equipment, electric power and gas, and transportation and communications industries was comparatively small. Moreover, close to half of the firms reported that the economic obsolescence of the plant

and equipment was "progressing" faster than 5 years before. Generally speaking, obsolescence in the processing industries, where the tempo of technological progress is rapid, is "progressing" relatively fast.

(Planned Replacement of Deteriorated and Obsolete Equipment)

#### 9. Over 90 Percent of the Firms Plan Replacement

Over 90 percent of the firms said that they "plan to replace" plant and equipment where deterioration and obsolescence have "become problems." Half of the firms who are not positively planning replacements said that the equipment "would be possible to use by means of repair."

#### 10. Over Half the Firms Plan to Increase Use of Leases

Close to 100 percent of the companies "already use" leases as a substitute for capital investment. Moreover, over half of the firms said they "plan to increase" their use of leases over the next 3 years. Of the leased equipment "already in use," almost 100 percent of the firms are leasing office equipment. Fifty percent are leasing production and sales equipment and vehicular and conveyance equipment. The equipment that the firms said they most "plan to increase" the use of leases for in the future was office equipment.

(Level of Technology and Level of Technological Research Strength)

#### 11. Level of Technology Has Caught Up With and Passed the United States

When we look at their awareness of the level of technology of Japanese firms in comparison with that of American firms, we find that whereas 5 years ago 17 percent of the firms believed Japan to be "superior"; 58 percent, "on par"; and 25 percent, "inferior," today, 25 percent of the firms believe Japan to be "superior"; 64 percent, "on par"; and 11 percent, "inferior." In addition, 32 percent of the companies believe that 5 years hence, Japan will be "superior"; 63 percent, "on par"; and 5 percent, "inferior."

When we turn to looking at the awareness of the technological research strength of Japanese firms, we find that whereas 5 years ago, 12 percent of the firms believed that Japanese firms were "superior" to American firms in this regard; 47 percent, "on par"; and 42 percent, "inferior," today 17 percent of the firms believe that Japan is "superior"; 55 percent, "on par"; and 29 percent, "inferior." Fully 23 percent of the firms believe that 5 years from now Japan will be "superior"; 63 percent, "on par"; and 14 percent, "inferior."

(Self-Development of Technology and Introduction of Technology)

#### 12. Stress on Self-Development of Technology

When we look at the ways to fight to succeed by the development of technology and the introduction of technology, we find that 60 percent of the firms responded with "the self-development of technology." "Introduction of technology



from other domestic firms" and "introduction of technology from foreign firms" were the responses of a little over 10 percent of the firms each. Sixty percent of the firms that chose "to emphasize the self-development of technology" did so because "self-development of technology has a high earnings potential." Thirty percent did so because "there are no technologies to introduce." Reasons given for "emphasizing the introduction of technology from other domestic firms and foreign firms" were "the cost is cheap," "the risk is small," and "a system for the self development of technology has not been put in place."

Moreover, 60 percent of the firms view "the introduction of technology from foreign firms" as "not having changed much at present," but, on the other hand, one-third of the firms view it as "becoming difficult."

#### 13. Sixty Percent of the Firms To Proceed With Research and Development on Their Own

When we look at the main research system for the future self-development of technology, we find that the greatest response, given by 60 percent of the firms was "to proceed with research and development on their own." Other responses given were "cooperative development with other companies from different industries," "joint development within the keiretsu [company affiliated firms] group," and "joint development with research organizations, such as universities." When we look at the manufacturing industries, the raw materials industries placed these in the following order: "develop on one's own," "with companies from other industries," and "with research organizations, such as universities." The processing industries chose the following order: "develop on one's own," "within the keiretsu," and "with research organizations, such as universities."

(Focal Points of Research and Development and Percentage of Research and Development Costs)

#### 14. Focal Points Are Development of New Products and Applied Research of Existing Products

Sixty percent of the firms said that "the development of new products (commercial products)" would be a focal point of research and development, and 60 percent said that "applied research of already existing products (commercial products)" would be a focal point. "Applications and development for diversification and inroads into new fields" held the top spot.

#### 15. Percentage of Research and Development Costs To Increase

When looking at the trend of the percentage of research and development costs in terms of sales, we find that 70 percent of the firms said that it would "rise" in comparison with 5 years ago, and 30 percent said that it would "remain virtually the same." Eighty percent of the companies believe that it will "rise" over the next 5 years, and 20 percent believe that it will "remain the same."

When we view the manufacturing industries, many of the processing industry firms said that the percentage of research and development costs had "risen greatly" in comparison with 5 years ago and "would rise greatly" 5 years hence.

### III. Trend of Direct Investment Overseas

(Record and Forecast of Direct Investment Overseas)

#### 16. Fifty Percent of the Firms Expect To Expand Direct Investment Overseas

Just less than 50 percent of the firms are "carrying out" direct investment overseas. Of the manufacturing firms, a little over 40 percent of the raw materials firms are doing so, and 60 percent of the processing firms are doing so. Forty percent of the nonmanufacturing firms are doing so. Next, when we look at the firms "carrying out" investment overseas, over 50 percent of these firms "expanded" direct investment overseas during the past 5 years, and over 40 percent kept their investments "at the same level." Over 50 percent of the firms plan to "expand" over the next 5 years and over 40 percent plan to remain "at the same level."

#### 17. Surge of Firms Planning To Invest in China

When looking at partner countries with regard to the firms "carrying out" direct investment overseas, most of the firms (70 percent), in terms of their records over the past 5 years, invested in "Asia." Sixty percent invested in "the United States and Canada," over 30 percent in "Europe (excluding the Communist bloc)," and some in "Latin America." As for 5 years from now, over 70 percent plan to be in "Asia," less than 60 percent in "the United States and Canada," and over 30 percent in "Europe." Within Asia, there is a surge of firms that plan to invest in "China." (4 percent in the past, 28 percent in the future.)

(Reasons for Making Direct Investments Overseas)

#### 18. Objective of Direct Investments Overseas Is to Expand Markets

When we look at the chief reasons for making direct investments overseas, we find that the greatest one (80 percent of the firms) is "to expand market outlets in the partner country's market." Other reasons are "to expand market outlets in third country markets," "to guarantee the price of raw materials and resources in the local area," "because exports from Japan have become difficult due to local import restrictions." When we look at individual industries, we find that "to expand market outlets in the partner country's market" occupies the top spot in each industry. In the second spot for the raw materials industries and the other manufacturing industries is "to guarantee the price of raw materials and resources of the local area." In second place for the processing industries is "because exports from Japan have become difficult due to local import restrictions." For the nonmanufacturing industries, second place is held by "to expand market outlets in third country markets."

As far as problems surrounding direct overseas investment are concerned, the greatest problem, which 60 percent of the companies gave, was "the fear of political instability and nationalization in the developing countries." Others were "guarantee of a good labor force," "personnel matters of employees assigned overseas," and "labor-management practices."

#### 1984 Opinion Survey of Business Activities

#### Major Statistical Tables

Table 1. 1985 Real Economic Growth Rate Forecast for Japan

	記入社数 合 計 (7)	0%未満 (8)	0%以上 1%未満 (9)	1%以上 2%未満	2%以上 3%未満	3%以上 4%未満	4%以上 5%未満	5%以上 6%未満	6%以上 7%未満	7%以上 8%未満	8%以上 9%未満	9%以上 10%未満	10%以上 (10)
(1) 全 業 界	1,140	-	-	-	0.4	6.8	68.8	22.4	1.3	0.1	0.1	-	0.1
(2) 製 造 業	749	-	-	-	0.5	6.7	69.2	22.0	1.3	0.1	-	-	0.1
(3) 原料産業部	222	-	-	-	0.5	8.1	73.4	16.7	0.9	0.3	-	-	-
(4) 加工産業部	301	-	-	-	1.0	5.9	68.1	23.4	1.3	-	-	-	0.3
(5) その他製造業	223	-	-	-	-	6.3	66.4	25.6	1.8	-	-	-	-
(6) 非製造業	391	-	-	-	0.3	7.2	68.0	21.0	1.2	-	0.3	-	-

#### Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Total number of firms entered (as responding)
8. Less than...
9. More than ... less than ...
10. Less than ...

Table 2. 1985-87 Average Real Economic Growth Rate Forecast

	記入社数 合 計 (7)	0%未満 (8)	0%以上 1%未満 (9)	1%以上 2%未満	2%以上 3%未満	3%以上 4%未満	4%以上 5%未満	5%以上 6%未満	6%以上 7%未満	7%以上 8%未満	8%以上 9%未満	9%以上 10%未満	10%以上 (10)
(1) 全 業 界	1,133	-	-	-	0.7	21.6	55.1	17.4	1.3	0.4	-	-	0.1
(2) 製 造 業	743	-	-	-	0.7	26.1	55.7	15.9	1.2	0.3	-	-	0.1
(3) 原材料産業	218	-	-	-	-	30.3	55.0	13.3	0.9	0.5	-	-	-
(4) 加工製造業	302	-	-	-	1.0	22.3	57.3	18.2	0.3	0.3	-	-	0.3
(5) その他製造業	223	-	-	-	0.9	26.9	54.3	15.2	2.7	-	-	-	-
(6) 非製造業	390	-	-	-	0.8	21.8	51.9	20.3	1.5	0.8	-	-	-

## Key:

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| 1. All industries                 | 6. Nonmanufacturing industries   |
| 2. Manufacturing industries       | 7. Total number of firms entered |
| 3. Raw materials industries       | 8. Less than ...                 |
| 4. Processing industries          | 9. More than ... less than ...   |
| 5. Other manufacturing industries | 10. Less than ...                |

Table 3. 1985-89 Average Real Economic Growth Rate Forecast

	記入社数 合 計 (7)	0%未満 (8)	0%以上 1%未満 (9)	1%以上 2%未満	2%以上 3%未満	3%以上 4%未満	4%以上 5%未満	5%以上 6%未満	6%以上 7%未満	7%以上 8%未満	8%以上 9%未満	9%以上 10%未満	10%以上 (10)
(1) 全 業 界	1,123	-	-	0.1	1.3	29.6	49.2	17.4	1.8	0.5	0.1	-	0.1
(2) 製 造 業	738	-	-	-	1.5	32.8	47.3	16.8	1.1	0.4	-	-	0.1
(3) 原材料産業	219	-	-	-	1.4	37.4	46.6	13.2	0.9	0.5	-	-	-
(4) 加工製造業	299	-	-	-	2.3	28.1	48.2	20.4	0.3	0.3	-	-	0.3
(5) その他製造業	220	-	-	-	0.5	34.5	46.8	15.5	2.3	0.5	-	-	-
(6) 非製造業	385	-	-	0.3	1.0	23.4	52.7	18.4	3.1	0.8	0.3	-	-

## Key:

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| 1. All industries                 | 6. Nonmanufacturing industries   |
| 2. Manufacturing industries       | 7. Total number of firms entered |
| 3. Raw materials industries       | 8. Less than ...                 |
| 4. Processing industries          | 9. More than ... less than ...   |
| 5. Other manufacturing industries | 10. Less than ...                |



Table 4. 1985 Real Business Demand Growth Rate Forecast

	記入社数 合 計 (7)	0%未満 (8)	0%以上 1%未満 (9)	1%以上 2%未満	2%以上 3%未満	3%以上 4%未満	4%以上 5%未満	5%以上 6%未満	6%以上 7%未満	7%以上 8%未満	8%以上 9%未満	9%以上 10%未満	10%以上 (10)
(1) 全 業 界	1,117	2.0	12.1	7.3	15.9	20.1	12.4	11.7	3.9	3.1	1.9	0.3	2.0
(2) 制 造 業	723	2.0	11.6	5.3	13.8	18.8	12.7	12.3	4.6	4.1	2.3	0.7	12.9
(3) 原料工業界	216	3.2	11.1	6.9	13.9	22.7	18.0	10.2	4.6	3.2	0.3	-	1.6
(4) 加工工業界	295	0.3	8.7	3.4	10.4	18.1	7.4	12.1	5.4	6.0	3.4	1.3	20.1
(5) その他製造業	219	3.2	18.0	6.8	15.3	18.7	12.3	14.6	3.7	2.3	-	0.3	3.7
(6) 非製造業	384	1.8	12.0	10.7	20.1	22.4	12.9	10.7	2.6	1.3	1.0	0.3	3.1

## Key:

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| 1. All industries                 | 6. Nonmanufacturing industries   |
| 2. Manufacturing industries       | 7. Total number of firms entered |
| 3. Raw materials industries       | 8. Less than ...                 |
| 4. Processing industries          | 9. More than ... less than ...   |
| 5. Other manufacturing industries | 10. Less than ...                |

Table 5. 1985-87 Average Real Business Demand Growth Rate Forecast

	記入社数 合 計 (7)	0%未満 (8)	0%以上 1%未満 (9)	1%以上 2%未満	2%以上 3%未満	3%以上 4%未満	4%以上 5%未満	5%以上 6%未満	6%以上 7%未満	7%以上 8%未満	8%以上 9%未満	9%以上 10%未満	10%以上 (10)
(1) 全 業 界	1,110	1.3	9.0	7.8	19.1	22.1	12.4	12.3	3.1	3.0	1.6	0.3	7.7
(2) 制 造 業	726	1.2	8.5	6.3	18.0	21.9	11.2	12.4	3.7	3.9	2.3	0.6	10.1
(3) 原料工業界	213	0.5	9.9	7.0	21.6	26.3	16.0	9.9	1.9	1.9	0.5	0.3	4.2
(4) 加工工業界	295	1.0	5.4	4.4	13.2	15.9	8.1	14.6	5.8	6.8	4.7	0.7	19.3
(5) その他製造業	219	2.3	11.5	8.3	21.1	25.7	10.6	11.9	2.8	1.8	0.9	-	3.2
(6) 非製造業	384	2.1	9.2	10.7	21.1	22.4	14.8	12.2	1.8	1.3	0.3	-	3.1

## Key:

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| 1. All industries                 | 6. Nonmanufacturing industries   |
| 2. Manufacturing industries       | 7. Total number of firms entered |
| 3. Raw materials industries       | 8. Less than ...                 |
| 4. Processing industries          | 9. More than ... less than ...   |
| 5. Other manufacturing industries | 10. Less than ...                |

Table 6. 1985-89 Average Real Business Demand Growth Rate Forecast

	記入数 合計 (7)	0%未満 (8)	0%以上 1%未満 (9)	1%以上 2%未満	2%以上 3%未満	3%以上 4%未満	4%以上 5%未満	5%以上 6%未満	6%以上 7%未満	7%以上 8%未満	8%以上 9%未満	9%以上 10%未満	10%以上 (10)
(1) 全 業 界	1,100	1.0	8.3	8.9	17.9	23.3	12.5	12.6	3.3	2.9	1.5	0.3	7.5
(2) 制 造 業	721	1.1	7.5	7.4	17.5	22.6	11.2	13.0	3.6	2.9	1.9	0.4	9.8
(3) 原料工業	213	0.5	9.4	8.0	20.2	28.6	15.5	8.9	2.3	0.9	0.9	-	4.7
(4) 加工製造業	293	1.0	3.8	4.8	13.7	16.0	9.6	16.0	5.1	7.2	3.4	1.0	18.4
(5) その他製造業	215	1.9	10.7	10.2	20.0	25.6	9.3	13.0	2.8	2.3	0.9	-	3.3
(6) 非製造業	379	0.8	9.8	11.9	18.7	21.5	15.0	11.9	2.6	1.1	0.8	-	2.9

Key:

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| 1. All industries                 | 6. Nonmanufacturing industries   |
| 2. Manufacturing industries       | 7. Total number of firms entered |
| 3. Raw materials industries       | 8. Less than ...                 |
| 4. Processing industries          | 9. More than ... less than ...   |
| 5. Other manufacturing industries | 10. Less than ...                |

Table 7. Items of Concern in the Current Business Environment

	記入社数 数 (7)	国内需要 (8)	製品価格 (9)	原材料 価格 (10)	技術動向 (11)	設備投資 動向 (12)	企業間 競争 (13)	輸入品 の動向 (14)	資金の 動向 (15)	国庫証券 の需要 (16)	高齢化 の進展 (17)	国等の 一変 (18)
(1) 全 業 界	1,193	85.8	80.7	34.0	37.0	23.3	63.1	8.7	14.3	14.2	11.1	3.1
(2) 11 業 界	761	86.7	83.6	39.6	49.0	19.8	65.4	9.9	7.5	8.1	8.1	0.9
(3) 原材料工業	223	84.3	81.2	57.8	32.7	13.5	68.9	24.7	9.0	3.1	6.7	0.1
(4) 加工型工業	309	85.4	83.4	15.5	63.4	29.8	71.5	1.0	4.2	10.0	7.8	1.0
(5) その他製造業	229	90.8	86.8	54.1	45.1	12.7	73.4	7.4	10.3	11.4	10.9	0.9
(6) 非製造業	391	84.0	22.1	23.4	13.7	29.9	61.5	6.4	27.9	25.4	16.2	9.1

	価値観の 多様化 (19)	海外需要 (20)	貿易摩擦 と保護主 義的圧力 (21)	原油市場 の動向 (22)	為替変動 (円相場) (23)	中国の 通い上げ (24)	インフ レシ ョン (25)	海外金利 (26)	税 制 投資促進 措置等 (27)	公共投資 (28)	国内金利 (29)	その他 (30)
全 業 界	12.7	38.1	11.9	11.3	26.3	3.5	2.4	1.3	6.7	18.9	13.3	1.0
11 業 界	8.7	41.9	14.1	8.5	29.0	4.1	1.6	0.8	2.1	13.9	6.8	0.9
原材料工業	4.5	37.2	10.8	12.6	36.3	6.7	1.3	1.3	2.2	11.2	9.9	0.1
加工型工業	5.5	70.2	22.7	3.9	21.9	4.3	2.3	0.3	1.9	15.3	2.6	0.3
その他製造業	17.0	18.3	5.7	10.9	27.3	0.9	0.9	0.9	3.1	14.4	9.6	2.2
非製造業	20.6	21.9	7.9	16.5	23.6	2.3	4.1	2.3	13.0	28.1	25.9	1.1

## Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Total number of firms entered
8. Domestic demand
9. Price of manufactured goods
10. Raw materials prices
11. Technological trends
12. Capital investment trends
13. Business competition
14. Imports trends
15. Wage trends
16. Transformation into a high information economic society
17. Progress of transformation into an old age society
18. Transformation into a service economy
19. Diversification of values
20. Overseas economy (overseas demand)
21. Trade friction and protectionist pressures
22. Oil market trends
23. Exchange rate fluctuations (price of the yen)
24. Pursuit by the industrializing countries
25. Country risk
26. Overseas interest rates
27. Tax system (preferential tax measures for investment, etc.)
28. Public service investment
29. Domestic interest rates
30. Miscellaneous

Table 8. Items of Concern for the Medium- and Long-Term Business Environment

	記入社数 合計 (7)	国内需要 (8)	製造業 (9)	平均利 率 (10)	技術動向 (11)	設備投資 動向 (12)	企業間 競争 (13)	輸入品 の動向 (14)	資金の 動向 (15)	経済社会 の高度 化 (16)	高齢化 の進展 (17)	経済の 停滞 (18)
(1) 全産業	1,148	76.0	32.4	27.8	32.2	21.1	55.7	9.4	12.1	31.3	29.0	9.1
(2) 製造業	757	75.7	40.7	32.1	46.2	19.7	54.8	11.8	6.3	21.6	27.2	5.0
(3) 原料工業	222	71.6	50.5	43.7	56.3	15.8	47.7	26.6	6.3	20.3	26.1	5.0
(4) 加工工業	307	75.2	29.7	14.0	78.5	28.7	56.4	1.0	4.9	30.0	23.5	2.6
(5) その他製造業	228	80.3	47.4	45.2	59.2	11.4	59.6	11.8	8.3	21.5	33.3	7.0
(6) 非製造業	391	76.5	16.4	19.4	25.1	23.8	57.3	4.9	23.3	44.2	32.5	16.9

	製造業の 多様化 (19)	海外需要 (20)	貿易摩擦 と保護主 義的圧力 (21)	原油市場 の動向 (22)	為替変動 (円相場) (23)	中道派の 進み上げ (24)	リスク (25)	海外金利 (26)	税制 改正 (27)	公共投資 (28)	国内金利 (29)	その他 (30)
全産業	17.6	23.7	11.9	13.9	17.2	19.5	3.0	1.2	9.7	15.9	9.1	0.8
製造業	14.7	28.7	13.9	12.7	18.1	12.9	2.2	0.9	2.2	11.6	4.2	0.9
原料工業	13.1	30.2	7.2	23.0	18.9	17.6	1.1	1.8	2.7	7.7	4.5	0.5
加工工業	9.1	39.6	24.1	5.3	16.3	16.3	3.9	0.7	1.3	13.1	2.3	0.7
その他製造業	23.7	18.9	6.6	12.3	19.7	3.9	0.9	0.1	3.1	13.2	6.6	1.8
非製造業	23.3	21.0	8.2	16.1	15.3	5.9	4.6	1.8	12.3	21.0	18.7	0.5

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Total number of firms entered
8. Domestic demand
9. Price of manufactured goods
10. Raw materials prices
11. Technological trends
12. Capital investment trends
13. Business competition
14. Imports trends
15. Wage trends
16. Transformation into a high information economic society
17. Progress of transformation into an old age society
18. Transformation into a service economy
19. Diversification of values
20. Overseas economy (overseas demand)
21. Trade friction and protectionist pressures
22. Oil market trends
23. Exchange rate fluctuations (price of the yen)
24. Pursuit by the industrializing countries
25. Country risk
26. Overseas interest rates
27. Tax system (preferential tax measures for investment, etc.)
28. Public service investment
29. Domestic interest rates
30. Miscellaneous



Table 9. 1985-87 Average Capital Investment Forecast

	記入総数 数 (7)	増 (8)			増減ばい (12)	減 (13) 少		
		全 計 (9)	大増増加 (10)	やや増加 (11)		全 計 (14)	やや減少 (15)	大減減少 (16)
(1) 全 通 算	1,153	52.1	15.7	36.4	42.1	3.3	3.4	2.1
(2) 制 造 業	763	57.9	18.3	39.6	37.1	5.0	3.7	1.3
(3) 原料製造業	225	56.9	16.1	40.8	37.3	3.8	4.9	0.9
(4) 加工製造業	309	61.1	21.6	39.5	32.4	3.6	2.3	1.3
(5) その他製造業	229	50.7	11.8	38.9	43.2	6.1	4.4	1.7
(6) 非製造業	390	40.8	10.3	30.5	52.8	6.4	2.8	3.6

Key:

- |                                   |                              |
|-----------------------------------|------------------------------|
| 1. All industries                 | 9. Subtotal                  |
| 2. Manufacturing industries       | 10. Large increase           |
| 3. Raw materials industries       | 11. Small increase           |
| 4. Processing industries          | 12. Remain at the same level |
| 5. Other manufacturing industries | 13. Decrease                 |
| 6. Nonmanufacturing industries    | 14. Subtotal                 |
| 7. Total number of firms entered  | 15. Small decrease           |
| 8. Increase                       | 16. Large decrease           |

Table 10. Priorities in Future (Next 3 Years) Capital Investment  
(total of 1st-3d places)

		記入 入 数 (8)	設 備 の 更 新 (9)	能 力 増 強 (10)	(11) 効 力 化 ・ 節 省 化				(16)	(17)	(18)	(19)	(20)	(21)
					小 計 (12)	事 務 部 (13)	製 造 部 (14)	販 売 部 (15)	資 材 部 等 の 一 部 門 等	新 産 品 の 開 発 等	設 備 の 修 理 等	研 究 開 発 等	新 建 設 等 の 開 発 等	そ の 他
(1)	全 業 界	1,151	48.6	38.4	72.9	25.1	52.3	8.9	5.0	47.6	21.9	35.9	11.9	1.7
(2)	製 造 業	762	45.8	37.7	79.3	15.2	71.1	5.5	5.8	56.3	15.9	43.3	1.8	0.9
(3)	農 林 漁 業	225	49.8	35.6	72.9	12.9	64.0	5.3	12.9	60.0	22.2	34.7	0.4	0.4
(4)	製 造 業	309	44.3	40.5	81.2	14.9	78.0	0.6	-	56.0	9.7	52.1	1.6	1.6
(5)	その他製造業	228	43.9	36.8	82.9	18.0	68.9	12.3	6.6	53.1	16.7	39.9	3.5	0.4
(6)	非 製 造 業	789	54.0	39.8	60.4	44.5	15.4	15.4	3.3	30.6	34.4	21.3	21.6	3.3

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. (Not used)
8. Total number of firms entered
9. Replacement of plant and equipment
10. Increase capacity
11. Reducing labor and increasing efficiency
12. Subtotal
13. Administrative sector
14. Manufacturing sector
15. Distribution sector
16. Energy conservation and alternate energy resources
17. Advances into new products and new fields
18. Plant and equipment repair
19. Research and development
20. New construction or remodeling of offices and stores
21. Miscellaneous

Table 11. Factors Considered When Deciding on Capital Investment  
(for the past 3 years)

	記入社数 合 計 (7)	製品需要 見 通 し (8)	既存設備 の 稼 働 状 況 (9)	収益水準 (10)	投資の予 想収益率 (11)	マーケッ トシェア の維持・大 拡 (12)	金利水準 (13)	税制上の 投資優遇 措置 (14)	技術革新 への対応 (15)	多 角 化 (16)	そ の 他 (17)
(1) 全 業 界	1,148	63.7	50.1	44.2	33.8	38.9	2.4	2.1	46.0	11.5	2.7
(2) 製 造 業	762	76.8	46.2	40.3	36.4	34.3	0.7	2.0	51.2	9.4	1.4
(3) 原料型業種	225	75.6	40.0	39.6	51.6	32.9	1.3	2.2	42.2	10.7	2.2
(4) 加工型業種	306	78.9	45.5	42.5	32.1	31.2	0.3	1.3	59.1	5.5	1.6
(5) その他製造業	229	75.1	53.3	38.0	27.1	39.7	0.4	2.6	49.3	13.5	0.1
(6) 非製造業	386	37.8	57.8	51.8	28.8	48.2	6.0	2.3	35.8	15.5	5.2

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Total number of firms entered
8. Manufactured products demand forecast
9. Operational condition of existing equipment
10. Level of earnings
11. Expected earnings rate of investment
12. Maintenance and expansion of market share
13. Level of interest rates
14. Preferential tax measures for investment
15. Response to technological innovation
16. Diversification
17. Miscellaneous

Table 12. Factors Considered When Deciding on Capital Investment  
(for the next 3 years)

	記入社数 合計 (7)	製造需要 見通し (8)	既存設備 の稼働 状況 (9)	収益水準 (10)	投資の予 想収益率 (11)	マーケッ トシェア の維持・ 拡大 (12)	金利水準 (13)	税制上の 投資促進 措置 (14)	技術革新 への対応 (15)	多角化 (16)	その他 (17)
(1) 全産業	1,147	61.1	29.7	40.8	39.1	39.7	2.3	1.3	59.3	19.4	2.7
(2) 製造業	761	73.3	23.3	26.0	42.7	33.2	0.7	1.1	68.5	18.1	1.3
(3) 原料製造業	225	69.8	19.6	35.6	57.3	30.2	0.4	1.8	60.0	21.3	2.2
(4) 加工製造業	307	75.6	22.5	35.8	38.1	33.2	0.7	0.3	78.2	12.7	1.3
(5) その他製造業	229	73.8	27.9	36.7	34.5	36.2	0.9	1.3	63.8	22.3	0.4
(6) 非製造業	386	37.0	42.5	50.3	31.9	52.3	5.4	1.8	41.2	21.8	5.1

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Total number of firms entered
8. Manufactured products demand forecast
9. Operational condition of existing equipment
10. Level of earnings
11. Expected earnings rate of investment
12. Maintenance and expansion of market share
13. Level of interest rates
14. Preferential tax measures for investment
15. Response to technological innovation
16. Diversification
17. Miscellaneous



Table 13. Forecast of New Equipment Installation as a Result of Technological Innovation

	(7) 記入社数 合計	(8) N C M C					
		(9) 既に設置済				(14) 設置していない	
		(9a) 増加			増加予定なし (13)	今後設置予定 (15)	今後もしも予定なし (16)
		(10) 計	大増に増加 (11)	若干増加 (12)			
(1) 全産業	1,158	36.3	7.2	29.1	3.7	6.6	53.5
(2) 製造業	763	52.9	10.9	42.1	4.8	9.0	33.2
(3) 原料型業種	225	29.3	2.7	26.7	4.0	16.0	50.7
(4) 加工型業種	309	83.2	21.0	62.1	4.9	3.6	8.4
(5) その他製造業	229	35.4	5.2	30.1	5.7	9.6	49.3
(6) 非製造業	395	4.1	-	4.1	1.5	1.8	92.7

	(7) 記入社数 合計	(17) 既に設置済				(14) 設置していない	
		増加			増加予定なし (13)	今後設置予定 (15)	今後もしも予定なし (16)
		小計	大増に増加	若干増加			
全産業	1,158	30.9	7.3	23.6	2.5	16.0	80.6
製造業	763	43.9	10.9	33.0	3.0	20.3	32.8
原料型業種	225	29.9	3.6	25.3	1.8	18.7	50.7
加工型業種	309	61.8	20.4	41.4	4.2	18.4	13.5
その他製造業	229	34.3	5.2	29.3	2.6	21.3	38.4
非製造業	395	5.8	0.5	5.3	1.5	7.6	85.1

Key:

- |  |  |
|--|--|
| 1. All industries  | 15. Plan to install in future  |
| 2. Manufacturing industries                                | 16. Have no plans for future   |
| 3. Raw materials industries                                | 17. Robots   |
| 4. Processing industries                                   | 18. CAD/CAM [computer-assisted design/<br>computer-assisted manufacturing] |
| 5. Other manufacturing industries                          | 19. Other FA [factory automation]<br>equipment                             |
| 6. Nonmanufacturing industries                             | 20. General purpose computers  |
| 7. Total number of firms entered                           | 21. Office computers   |
| 8. NC and MC [Numerical controls and<br>machining centers] | 22. On-line terminal equipment   |
| 9. Already installed                                       | 23. Facsimile  |
| 9a. Increase   | 24. LAN [local area network]   |
| 10. Subtotal   | 25. Other OA [office automation]<br>equipment                              |
| 11. Large increase   |  |
| 12. Small increase   |  |
| 13. No planned increase                                    |  |
| 14. Have not installed                                     |  |

	記入社数 合 計	(18) C A D / C A M				設置していない	
		既 に 設 置 済			増加予定 なし	今後設置 予定	今後 も 予定なし
		小 計	大幅に増加	若干増加			
全 産 業	1,158	27.5	8.5	19.0	3.2	20.0	49.2
制 造 業	763	35.4	11.0	24.4	3.8	24.1	36.7
原材料産業	225	22.7	3.6	19.1	1.8	24.4	51.1
加工産業	309	56.3	21.0	35.3	5.8	26.9	11.0
その他製造業	229	19.7	4.8	14.9	3.1	20.1	57.2
非 制 造 業	395	12.4	3.8	8.6	2.0	12.2	73.4

	記入社数 合 計	(19) そ の 他 F A 設 置				設置していない	
		既 に 設 置 済			増加予定 なし	今後設置 予定	今後 も 予定なし
		小 計	大幅に増加	若干増加			
全 産 業	1,158	1.2	0.5	0.7	0.3	0.4	98.0
制 造 業	763	1.3	0.8	0.5	0.3	0.7	97.8
原材料産業	225	1.8	0.9	0.9	-	-	98.2
加工産業	309	1.0	0.3	0.6	0.3	0.6	98.1
その他製造業	229	1.3	1.3	-	0.4	1.3	96.9
非 制 造 業	395	1.0	-	1.0	0.5	-	98.5

	記入社数 合 計	(20) 汎 用 コ ン ピ ュ ー ー				設置していない	
		既 に 設 置 済			増加予定 なし	今後設置 予定	今後 も 予定なし
		小 計	大幅に増加	若干増加			
全 産 業	1,158	56.3	8.7	49.6	27.5	2.5	13.6
制 造 業	763	59.5	5.9	53.6	26.1	2.6	11.8
原材料産業	225	56.9	5.8	51.1	25.3	3.1	14.7
加工産業	309	60.8	6.5	54.4	27.8	1.9	9.4
その他製造業	229	60.3	5.2	55.0	24.5	3.1	12.2
非 制 造 業	395	50.1	8.4	41.8	30.4	2.3	17.2

	記入社数 合 計	(21) オ フ コ ン				設置していない	
		既 に 設 置 済			増加予定 なし	今後設置 予定	今後 も 予定なし
		小 計	大幅に増加	若干増加			
全 産 業	1,158	72.7	14.4	58.3	13.6	4.2	9.5
制 造 業	763	74.3	14.2	60.2	12.7	3.8	9.2
原材料産業	225	69.8	15.6	54.2	14.2	5.8	10.2
加工産業	309	75.1	13.3	61.8	12.3	2.6	10.0
その他製造業	229	77.7	14.0	63.8	11.8	3.3	7.0
非 制 造 業	395	69.6	14.9	54.7	15.2	5.1	10.1

	記入社数 合 計	(22) オ ン ラ イ ン 端 末 装 置					
		既 に 設 置 済				設置していない	
		増 加			増加予定 なし	今後設置 予定	今後 も 予定なし
		小 計	大増に増加	若干増加			
全 機 器	1,158	77.9	25.7	52.2	5.6	7.8	8.7
計 通 信	763	81.0	25.4	53.6	5.5	7.2	6.3
資料型端末	225	80.4	23.1	57.3	5.8	7.1	6.7
加工型端末	309	81.8	29.4	53.3	2.3	6.1	6.8
その他制通工	229	76.4	22.3	54.1	9.6	8.7	5.2
非 制 通 工	395	71.9	26.3	45.6	5.8	8.9	13.4

	記入社数 合 計	(23) フ ァ ー ミ リ					
		既 に 設 置 済				設置していない	
		増 加			増加予定 なし	今後設置 予定	今後 も 予定なし
		小 計	大増に増加	若干増加			
全 機 器	1,158	64.9	9.2	53.6	30.1	1.1	4.0
計 通 信	763	61.9	8.0	53.9	35.3	0.5	2.4
資料型端末	225	60.0	8.0	52.0	37.8	-	2.2
加工型端末	309	65.0	8.1	57.0	32.0	-	2.9
その他制通工	229	59.4	7.9	51.5	37.1	1.7	1.7
非 制 通 工	395	70.6	11.6	59.0	20.0	2.3	7.1

	記入社数 合 計	(24) L A N (企業内閉鎖通信用)		
		既 に 設 置 済	設置していない	
			今後設置 予定	今後 も 予定なし
全 機 器	1,158	6.7	27.6	63.6
計 通 信	763	6.7	28.2	63.1
資料型端末	225	5.8	26.2	68.0
加工型端末	309	9.4	31.1	59.2
その他制通工	229	3.9	25.8	70.3
非 制 通 工	395	6.8	28.6	66.6

	記入社数 合 計	(25) そ の 他 O A 装 置					
		既 に 設 置 済				設置していない	
		増 加			増加予定 なし	今後設置 予定	今後 も 予定なし
		小 計	大増に増加	若干増加			
全 機 器	1,158	4.7	2.0	2.8	0.8	0.4	91.0
計 通 信	763	4.5	1.8	2.6	0.7	0.1	94.5
資料型端末	225	4.0	1.8	2.2	0.9	-	93.1
加工型端末	309	5.2	1.9	3.2	0.3	0.6	93.9
その他制通工	229	3.9	1.7	2.2	0.9	0.4	91.8
非 制 通 工	395	5.3	2.3	3.0	1.0	0.5	93.2

Table 14. Deterioration of Plant and Equipment

		(7) 現在(5年前と比べて)					(14) 今後5年間				
		記入社数 合 (8)	(9) 進んでいる			ほとんど 変わらない (13)	記入社数 合 (15)	(16) 進んでいる			ほとんど 変わらない (20)
			少 (10)	かなり進 んでいる (11)	やや進 んでいる (12)			少 (17)	かなり進 んでいる (18)	やや進 んでいる (19)	
(1)	全産業	1,158	57.9	11.9	48.5	42.1	1,158	58.4	15.3	43.1	41.6
(2)	製造業	763	60.4	10.4	50.1	39.6	763	59.5	15.9	43.6	40.5
(3)	原料製造業	225	68.0	16.0	52.0	32.0	225	61.4	15.6	48.9	35.6
(4)	加工製造業	309	55.0	7.4	48.5	41.0	309	51.5	15.2	36.2	45.5
(5)	その他製造業	229	59.0	8.7	50.2	41.0	229	65.5	17.0	43.3	34.5
(6)	非製造業	395	53.2	7.6	45.6	46.8	395	56.2	14.2	42.0	43.8

## Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Present (compared to 5 years ago)
8. Total number of firms entered
9. Progressing
10. Subtotal
11. Progressing considerably
12. Progressing somewhat
13. Hardly changed at all
14. Future 5 years hence
15. Total number of firms entered
16. Progressing
17. Subtotal
18. Progressing considerably
19. Progressing somewhat
20. Hardly changed at all



Table 15. Obsolescence of Plant and Equipment

		(7) 現在(5年前と比べて)					(14) 今後5年間								
		起入社数 合(8)計	(9) 進んでいる		ほとんど 変わらない(13)	起入社数 合(15)計	(16) 進んでいる		ほとんど 変わらない(20)						
			小(10)計	かなり進 んでいる			やや進 んでいる	小(17)計		かなり進 んでいる	やや進 んでいる				
(1)	全産業	1,158	45.4	(11)	4.7	(12)	90.8	54.6	1,158	51.4	(18)	11.7	(19)	39.6	48.6
(2)	製造業	763	47.8	5.5	42.3	52.2	763	52.6	12.5	40.1	47.4				
(3)	採掘業	225	43.1	5.8	37.3	56.9	225	48.9	10.2	33.7	51.1				
(4)	加工業	309	51.8	5.8	46.0	48.2	309	50.8	13.6	37.2	49.2				
(5)	その他製造業	229	47.2	4.8	42.4	52.8	229	58.5	13.1	45.4	41.5				
(6)	非製造業	395	40.8	3.0	37.7	59.2	395	49.1	10.4	38.7	50.9				

## Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Present (compared to 5 years ago)
8. Total number of firms entered
9. Progressing
10. Subtotal
11. Progressing considerably
12. Progressing somewhat
13. Hardly changed at all
14. Future 5 years hence
15. Total number of firms entered
16. Progressing
17. Subtotal
18. Progressing considerably
19. Progressing somewhat
20. Hardly changed at all

Table 16. Concern Over Deterioration and Obsolescence of Plant and Equipment

		(7) 老 朽 化					(14) 経 済 的 陳 腐 化				
		記入社数 数 (8) 計	(9) 問題になっている			問題はない (13)	記入社数 数 (15) 計	(16) 問題になっている			問題はない (20)
			小 (10) 計	非常に問題 になっている	やや問題に なっている			小 (17) 計	非常に問題 になっている	やや問題に なっている	
(1)	全 業 界	1,158	52.8	(18) 5.7	(12) 47.2	47.2	1,158	39.3	(19) 3.3	(19) 36.0	60.5
(2)	製 造 業	763	57.1	4.8	52.3	42.9	763	44.2	3.3	40.9	55.8
(3)	原料製造業	225	64.9	7.1	57.8	35.1	225	40.4	2.7	37.8	59.6
(4)	加工製造業	309	54.0	4.5	49.5	46.0	309	49.2	4.2	45.0	50.8
(5)	その他製造業	229	53.7	3.3	50.7	46.3	229	41.0	2.6	38.4	59.0
(6)	非製造業	395	44.6	7.3	37.2	55.4	395	30.4	3.8	26.6	69.6

## Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Deterioration
8. Total number of firms entered
9. Becoming a problem
10. Subtotal
11. Becoming an extreme problem
12. Becoming somewhat of a problem
13. No problem at all
14. Economic obsolescence
15. Total number of firms entered
16. Becoming a problem
17. Subtotal
18. Becoming an extreme problem
19. Becoming somewhat of a problem
20. No problem at all

Table 17. Plans for Replacement of Plant and Equipment

	記入社数 合 計 (7)	(8) 更新する予定			現状で は困難 (12)
		小 計 (9)	積極的に (10)	徐々に (11)	
(1) 全 産 業	768	93.6	26.6	67.1	6.4
(2) 製 造 業	541	94.6	26.4	68.2	5.4
(3) 原料製造業	168	93.5	20.8	72.6	6.5
(4) 加工製造業	218	95.9	31.9	64.0	4.1
(5) その他製造業	155	94.2	20.6	73.5	5.8
(6) 非製造業	227	91.2	26.9	64.3	8.8

## Key:

- |                                   |   |
|-----------------------------------|---|
| 1. All industries                 | 7. Total number of firms entered              |
| 2. Manufacturing industries       | 8. Plans for replacement                      |
| 3. Raw materials industries       | 9. Subtotal                                   |
| 4. Processing industries          | 10. Positively                                |
| 5. Other manufacturing industries | 11. Gradually                                 |
| 6. Nonmanufacturing industries    | 12. Difficult under the present circumstances |

Table 18. Reasons for Being Unable to Replace Plant and Equipment

	記入社数 合 計 (7)	製品の需要 見通しが 立たない (8)	収入の改善 が見込め ない (9)	資金難 (10)	修繕等 により 使用可能 (11)	その他 (12)
(1) 全 産 業	561	18.8	30.5	7.8	41.5	7.1
(2) 製 造 業	398	21.6	31.4	8.5	41.2	6.8
(3) 原料製造業	133	9.0	37.6	12.8	41.4	7.5
(4) 加工製造業	142	29.6	29.6	7.0	38.0	5.6
(5) その他製造業	123	26.0	26.8	5.7	41.7	7.3
(6) 非製造業	166	12.0	25.3	6.0	52.4	7.8

## Key:

- |                                   |   |
|-----------------------------------|---|
| 1. All industries                 | 8. Product demand forecast inadequate         |
| 2. Manufacturing industries       | 9. No improvement of earnings fore-<br>casted |
| 3. Raw materials industries       | 10. Funds insufficient                        |
| 4. Processing industries          | 11. Possible to use by repairs                |
| 5. Other manufacturing industries | 12. Miscellaneous                             |
| 6. Nonmanufacturing industries    |   |
| 7. Total number of firms entered  |   |

Table 19. Percentage of Funds Procured When Making Capital Investments

(1) Total of 1st-3rd Past Rankings (Past 3 years)

	記入社数 金 (7)	内部資金 (8)	株 式 (9)	(10) 社 債				(15) 外 債			(19) 借 入 金		
				小 計 (11)	普通社債 (12)	転換社債 (13)	新(14)社 債発行 (14)	小 計 (16)	普通社債 (17)	転換社債 (18)	小 計 (20)	長 期 借 入 金 (21)	中 期 借 入 金 (22)
(1) 全 業 界	1,341	89.3	25.2	17.4	3.8	12.5	1.7	18.7	4.3	15.4	71.4	58.1	45.5
(2) 制 造 業	737	90.5	26.6	18.9	2.8	14.8	2.2	21.0	4.5	17.4	68.8	56.1	42.0
(3) 原材料製造業	222	88.7	20.7	18.9	4.1	12.6	3.6	17.6	6.3	11.7	80.6	71.2	48.2
(4) 加工製造業	308	91.6	29.9	21.1	2.6	16.9	2.3	25.6	4.5	22.4	62.3	48.4	39.6
(5) その他製造業	227	90.7	27.8	15.9	1.8	14.1	0.9	18.1	2.6	16.3	64.1	52.0	39.2
(6) 非製造業	381	87.0	22.7	14.3	5.7	8.1	0.5	14.1	3.9	11.5	76.6	62.0	52.3

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Total number of firms entered
8. Internal funds
9. Stock
10. Debentures
11. Subtotal
12. Ordinary debentures
13. Convertible debentures
14. Debentures with new stock issue authority attached
15. Foreign funds
16. Subtotal
17. Ordinary debentures
18. Convertible debentures
19. Loans
20. Subtotal
21. Long term loans
22. Medium term loans



(5) Total of 1st-3rd Future Rankings (Next 3 Years)

	起入社数 合 計 (7)	内部資金 内 容 (8)	株 式 (9)	(10) 社 債				(15) 外 資			(19) 借 入 金		
				全 計 (11)	普通社債 (12)	転換社債 (13)	新 規 引 受 額 計 入 社 債 (14)	小 計 (16)	普通社債 (17)	転換社債 (18)	全 計 (20)	長期 借 入 金	中 期 借 入 金
(1) 全 業 界	1,132	91.2	21.5	23.9	4.2	18.9	1.8	18.9	3.4	15.8	72.5	71.8	22.7
(2) 製 造 業	753	92.2	22.4	26.2	2.5	22.7	2.4	19.5	3.5	16.5	70.4	56.0	43.2
(3) 資 材 製 造 業	221	90.5	19.9	25.3	3.2	21.3	2.3	18.1	4.5	14.0	80.5	67.4	48.0
(4) 加 工 製 造 業	305	93.8	21.9	29.2	2.6	24.9	3.0	25.6	3.0	23.0	63.3	47.2	80.0
(5) その他製造業	227	91.6	21.6	22.9	1.8	21.1	1.8	12.8	3.1	10.1	20.0	54.8	14.1
(6) 非 製 造 業	379	89.2	19.5	19.3	7.7	11.3	0.5	11.6	3.4	8.4	76.8	60.4	51.6

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Total number of firms entered
8. Internal funds
9. Stock
10. Debentures
11. Subtotal
12. Ordinary debentures
13. Convertible debentures
14. Debentures with new stock issue authority attached
15. Foreign funds
16. Subtotal
17. Ordinary debentures
18. Convertible debentures
19. Loans
20. Subtotal
21. Long term loans
22. Medium term loans

Table 20. Use of Leases

	記入社数 合計 (7)	(8) 既に利用している				(13) 利用していない		
		合計 (9)	増 (10)	増(加) 減(少) (11)	減 (12)	合計 (14)	新たに利 用する	利 用しない
(1) 全 業 界	1,158	96.9	54.8	39.3	2.6	3.1(15)	0.4(16)	2.7
(2) 制 造 業	763	96.7	54.9	39.2	2.6	3.3	0.4	2.9
(3) 原料製造業	225	95.6	53.8	40.0	1.8	4.4	0.9	3.6
(4) 加工製造業	309	96.1	55.7	39.2	2.3	3.9	0.3	3.6
(5) その他製造業	229	98.7	55.0	39.7	3.9	1.3	-	1.3
(6) 非製造業	395	97.2	54.7	40.0	2.3	2.8	0.5	2.3

## Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Total number of firms entered
8. Already using leases
9. Subtotal
10. Increase
11. Remain the same
12. Decrease
13. Have not been using leases
14. Subtotal
15. Will use
16. Will not use

Table 21. Level of Technology Compared to American Firms

		(7) 5 年 前				(12) 現 在				(17) 5 年 後			
		記入社数 合 計 (8)	優 位 (9)	同程度 (10)	劣 位 (11)	記入社数 合 計 (13)	優 位 (14)	同程度 (15)	劣 位 (16)	記入社数 合 計 (18)	優 位 (19)	同程度 (20)	劣 位 (21)
(1)	全 産 業	961	17.0	58.2	24.9	963	25.3	63.8	10.9	962	32.3	62.6	5.1
(2)	製 造 業	741	17.8	59.5	22.7	744	27.2	64.5	8.3	742	35.6	60.0	4.4
(3)	原料製造業	216	22.7	63.4	13.9	218	28.4	67.9	3.7	217	33.2	64.5	2.3
(4)	加工製造業	303	16.8	55.4	27.7	303	28.1	64.0	7.9	303	39.6	55.8	4.6
(5)	その他製造業	222	14.4	61.3	24.3	222	24.7	61.9	13.3	222	32.4	61.3	6.3
(6)	非製造業	220	14.1	53.6	32.3	219	19.2	61.2	19.6	220	21.2	71.4	7.3

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Past 5 years
8. Total number of firms entered
9. Superior
10. On par
11. Inferior
12. Present
13. Total number of firms entered
14. Superior
15. On par
16. Inferior
17. Next 5 years
18. Total number of firms entered
19. Superior
20. On par
21. Inferior

Table 22. Level of Technological Research Strength Compared to American Firms

		(7) 5 年 前				(12) 現 在				(17) 5 年 後			
		記入社数 合 計 (8)	優 位 (9)	同程度 (10)	劣 位 (11)	記入社数 合 計 (13)	優 位 (14)	同程度 (15)	劣 位 (16)	記入社数 合 計 (18)	優 位 (19)	同程度 (20)	劣 位 (21)
(1)	全 産 業	958	11.6	46.6	41.8	987	16.7	51.6	29.6	956	22.9	63.4	13.7
(2)	製 造 業	742	12.5	46.3	41.0	741	18.1	51.2	29.7	741	23.2	61.8	15.0
(3)	採 掘 業	217	16.6	49.3	34.1	217	16.9	56.3	22.6	217	24.9	63.6	11.5
(4)	組 織 業	303	11.2	42.6	46.2	303	19.1	50.5	30.4	303	27.1	59.1	13.9
(5)	其 他 製 造 業	222	10.4	49.1	40.5	221	13.8	58.4	25.9	221	23.1	63.8	13.1
(6)	非 製 造 業	216	8.3	46.8	44.9	216	12.0	52.8	35.2	213	14.9	68.8	16.3

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Past 5 years
8. Total number of firms entered
9. Superior
10. On par
11. Inferior
12. Present
13. Total number of firms entered
14. Superior
15. On par
16. Inferior
17. Next 5 years
18. Total number of firms entered
19. Superior
20. On par
21. Inferior



Table 23. Dealing With Self Development of Technology and Introduction of Technology

	記入社数 合 計 (7)	自主技術 開 発 (8)	国内企業 からの 技術導入 (9)	外国企業 からの 技術導入 (10)	技術開発、 技術導入を 行わない。 (11)	その他 (12)
(1) 全 産 業	1153	59.8	12.8	12.0	14.3	1.0
(2) 製 造 業	763	74.0	9.3	14.8	1.2	0.7
(3) 原料製造業	225	74.2	11.1	12.4	1.8	0.4
(4) 加工製造業	309	72.5	7.4	18.8	0.6	0.6
(5) その他製造業	229	76.0	10.0	11.8	1.3	0.9
(6) 非製造業	395	32.4	19.5	6.6	39.7	1.8

Key:

- |                                   |  |
|-----------------------------------|--|
| 1. All industries                 | 8. Self development of technology  |
| 2. Manufacturing industries       | 9. Introduction of technology from other domestic firms                      |
| 3. Raw materials industries       | 10. Introduction of technology from foreign firms                            |
| 4. Processing industries          | 11. Do not carry out development of technology or introduction of technology |
| 5. Other manufacturing industries | 12. Miscellaneous  |
| 6. Nonmanufacturing industries    |  |
| 7. Total number of firms entered  |  |

Table 24. Reasons for Focusing on Self Development of Technology

	記入社数 合 計 (7)	技術導入 が難しく なった (8)	自ら創造 する必要 がある (9)	自主技術開 発のほうが 収益性が高 い (10)	その他 (11)
(1) 全 産 業	693	4.9	29.4	60.5	5.2
(2) 製 造 業	565	5.7	30.4	59.6	4.2
(3) 原料製造業	167	8.4	31.7	56.3	3.6
(4) 加工製造業	224	6.3	29.9	58.9	4.9
(5) その他製造業	174	2.3	29.9	61.8	4.0
(6) 非製造業	128	1.6	25.0	61.1	9.4

Key:

- |                                   |  |
|-----------------------------------|--|
| 1. All industries                 | 7. Total number of firms entered                               |
| 2. Manufacturing industries       | 8. Introduction of technology became difficult                 |
| 3. Raw materials industries       | 9. Creation on one's own is essential                          |
| 4. Processing industries          | 10. Profit potential of self development of technology is high |
| 5. Other manufacturing industries | 11. Miscellaneous  |
| 6. Nonmanufacturing industries    |  |

Table 25. Reasons for Focusing on Introduction of Technology From Other Domestic Firms or From Foreign Firms

	記入社数 合計 (7)	自社で開発 するより、 リスクが小 さい。 (8)	自社で開発 するより、 コストが安 い。 (9)	自主技術開 発の体制が できていな い。 (10)	その他 (11)
(1) 全産業	287	32.1	43.2	23.0	1.7
(2) 製造業	184	38.6	39.7	20.1	1.6
(3) 原料産業	53	37.7	37.7	24.5	-
(4) 加工産業	81	42.0	39.5	18.5	-
(5) その他製造業	50	34.0	42.0	18.0	6.0
(6) 非製造業	103	20.4	49.5	28.2	1.9

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Total number of firms entered
8. Risk is small because development is by one's own company
9. Cost is cheap because development is by one's own company
10. System for the self development of technology has not been put in place
11. Miscellaneous

Table 26. Future Environment for Introduction of Technology

		(7) 国内企業から				(12) 外国企業から			
		記入社数 (8)	容易になる (9)	現在とあまり 変わらない (10)	困難になる (11)	記入社数 (13)	容易になる (14)	現在とあまり 変わらない (15)	困難になる (16)
(1)	全産業	287	8.0	72.8	19.2	287	6.6	61.3	32.1
(2)	製造業	184	7.1	68.6	23.4	184	7.6	53.8	38.6
(3)	原料産業	53	5.7	66.0	28.3	53	7.5	56.6	35.8
(4)	加工製造業	81	4.9	72.8	22.2	81	6.2	48.1	45.7
(5)	その他製造業	50	12.0	68.0	20.0	50	10.0	60.0	30.0
(6)	非製造業	103	9.7	78.6	11.7	103	4.9	74.8	20.4

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. From other domestic firms
8. Total number of firms entered
9. Will become easier
10. Will not change too much from the present
11. Will become more difficult
12. From foreign firms
13. Total number of firms entered
14. Will become easier
15. Will not change too much from the present
16. Will become more difficult

Table 27. Research System for Future Development of Technology

	記入社数 計 (8)	自社のみで 研究開発を 進める(9)	系列内グル ープでの共 同開発(10)	同業他社 との共同 開発(11)	異業他 他社との 共同開発 (12)	大学等研究 機関との共 同開発 (13)	国際的 共同開発 (14)	その他 (15)
(1) 全 産 業	1,061	58.6	38.7	13.5	41.2	34.3	6.3	0.7
(2) 製 造 業	758	61.2	36.1	10.2	39.6	40.6	7.1	0.3
(3) 原料工業	223	59.6	38.6	8.5	43.5	41.3	4.5	-
(4) 加工工業	307	64.8	38.8	8.3	35.2	38.1	9.1	0.7
(5) その他製造業	228	57.9	30.3	14.0	41.7	43.4	7.0	-
(6) 非製造業	303	52.1	45.2	21.8	45.2	18.5	4.3	1.7

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. (Not used)
8. Total number of firms entered
9. Will proceed with research and development alone
10. Joint development within the keiretsu group
11. Joint development with other firms in the same industry
12. Cooperative development with other firms from different industries
13. Joint development with research organizations, such as universities
14. International joint development
15. Miscellaneous

Table 28. Focal Points of Research and Development

	記入社数 合 計 (8)	基礎研究 の強化 (9)	既存製品 (商品) における 応用研究 (10)	新製造法の 開発 (11)	新 製 品 (商品) の開発 (12)	多角化・ 新 分 野 への応用 ・ 開 発 (13)	省エネルギー・省 資 源 (14)	情報処理 体制の充 実・強化 (15)	公害防止 (16)	デザイン 等での製 品差別化 (17)	そ の 他 (18)
(1) 全 業 界	1,062	11.8	58.4	12.7	59.2	31.7	4.9	9.0	0.9	4.3	1.2
(2) 製 造 業	758	11.2	64.8	13.3	71.5	31.1	2.1	1.5	0.1	3.2	0.1
(3) 素材工業	221	9.1	61.6	17.0	69.2	33.5	3.6	2.2	-	2.7	-
(4) 加工工業	306	9.5	71.9	9.2	74.2	29.4	1.0	0.7	0.3	3.3	0.3
(5) その他製造業	229	15.4	58.3	15.4	70.2	31.1	2.2	1.8	-	3.3	0.9
(6) 非製造業	301	13.2	42.1	11.2	28.6	43.8	11.8	28.0	3.0	7.2	3.3

## Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. (Not used)
8. Total number of firms entered
9. Strengthening of basic research
10. Applied research for existing products (commercial products)
11. Development of new manufacturing laws
12. Development of new products (commercial products)
13. Application and development towards diversification and new fields
14. Energy conservation and resource conservation
15. Enlarging and strengthening of the information processing system
16. Pollution prevention
17. Product differentiation by design, etc.
18. Miscellaneous



Table 29. Total Research and Development Costs as a Percentage of Sales

		(7) 現在(5年前と比べて)						(14) 5 年 後					
		記入社数 合 (8)	大 幅 に 上 が る (9)	や や 上 が る (10)	は ば お ぼ け (11)	や や 下 が る (12)	大 幅 に 下 が る (13)	記入社数 合 (15)	大 幅 に 上 が る (16)	や や 上 が る (17)	は ば お ぼ け (18)	や や 下 が る (19)	大 幅 に 下 が る (20)
(1)	全 業 界	1,051	18.6	49.5	30.4	1.6	-	1,050	20.7	60.6	18.4	0.4	-
(2)	制 造 業	758	21.8	50.4	26.3	1.6	-	758	22.7	61.6	15.3	0.4	-
(3)	原料製造業	225	18.7	50.2	29.8	1.3	-	225	19.6	62.2	18.2	-	-
(4)	加工製造業	306	25.5	48.7	23.5	2.3	-	306	26.8	61.1	11.8	0.3	-
(5)	その他製造業	227	19.8	52.9	26.4	0.9	-	227	20.3	61.7	17.2	0.9	-
(6)	非製造業	292	10.2	47.1	41.0	1.7	-	292	15.4	57.9	26.4	0.3	-

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Present (compared to 5 years ago)
8. Total number of firms entered
9. Rising greatly
10. Rising somewhat
11. Remaining at virtually the same level
12. Falling somewhat
13. Falling greatly
14. 5 years from now
15. Total number of firms entered
16. Rising greatly
17. Rising somewhat
18. Remaining at virtually the same level
19. Falling somewhat
20. Falling greatly

Table 30. Record and Future Forecast of Direct Investment Overseas

	(7) 海外直接投資	(11) 過去5年の実績				(16) 今後5年				(21) 今後5年				
		総額 人(8) 百万円	行な って(9)	行ない ない(10)	行な って(12)	膨 大(13)	保 持(14)	減 少(15)	行な って(17)	膨 大(18)	保 持(19)	減 少(20)	行な って(22)	行ない ない(23)
(1) 全 産 業	1,158	47.8	52.2	553	52.3	41.6	6.1	553	51.2	42.3	6.3	605	13.9	86.1
(2) 制 造 業	763	51.1	48.9	390	52.6	42.3	5.1	390	51.8	41.0	7.2	373	14.2	85.8
(3) 原材料産業	225	43.6	56.4	98	38.8	50.0	11.2	98	40.8	46.9	12.2	127	8.7	91.3
(4) 加工型産業	309	59.5	40.5	184	62.0	35.3	2.7	184	62.0	35.3	2.7	125	17.6	82.4
(5) その他製造業	229	47.2	52.8	108	49.1	47.2	3.7	108	41.4	45.4	10.2	121	16.3	83.7
(6) 非 制 造 業	395	41.3	58.7	163	51.5	39.9	8.6	163	49.7	45.4	4.9	232	13.4	86.6

## Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Direct investment overseas
8. Total number of firms entered
9. Carrying it out
10. Not carrying it out
11. Record for the past 5 years
12. Total carried out
13. Expanded
14. Remained the same
15. Declined
16. Next 5 years
17. Total to be carried out
18. Expanding
19. Remaining the same
20. Declining
21. Next 5 years
22. Total not being carried out
23. Plan to make inroads in the future
24. Do not plan to make inroads in the future

Table 31. Partners (Countries) of Direct Investment Overseas--Record of the Past 5 Years

	全 入 社 計 (7)	全 米 ・ 加 (8)	欧 ・ 中 (9)	(10) ア ジ ア					大 洋 洲 (16)	中 近 東 (17)	中 南 米 (18)	ア フリ カ (19)	そ の 他 (20)
				小 計 (11)	北 東 ア ジ ア (12)	東 南 ア ジ ア (13)	南 西 ア ジ ア (14)	中 国 (15)					
(1) 全 業 界	553	60.2	32.7	73.2	33.3	55.9	5.8	4.2	14.5	9.6	22.8	5.8	0.2
(2) 製 造 業	390	59.7	34.6	72.1	34.1	53.6	4.9	2.1	12.1	6.4	21.8	4.1	-
(3) 資 料 産 業 界	98	50.0	18.4	79.6	30.6	58.2	3.1	2.0	8.2	10.2	28.6	6.1	-
(4) 加 工 産 業 界	184	70.1	45.1	70.1	37.0	51.6	7.6	2.7	14.7	7.6	22.8	4.9	-
(5) その他製造業	108	50.9	31.5	68.5	32.4	52.8	1.9	0.9	11.1	0.9	13.9	0.9	-
(6) 非 製 造 業	163	61.3	29.2	76.1	31.3	61.3	8.0	9.2	20.2	17.2	25.2	9.8	0.4

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Total number of firms entered
8. United States and Canada
9. Europe (excluding the Communist bloc)
10. Asia
11. Subtotal
12. Northeast Asia
13. Southeast Asia
14. Southwest Asia
15. China
16. Pacific Ocean area
17. Middle East
18. Latin America
19. Africa
20. Miscellaneous

Table 32. Partners (Countries) of Direct Investment Overseas--Forecast for the Next 5 Years

		記 入 社 数 計 (7)	業 業 ・ 業 (8)	欧 美 諸 国 を く (9)	(10) ア シ ア					大 洋 州 (16)	中 近 東 (17)	中 南 米 (18)	ア フリ カ (19)	そ の 他 (20)
					小 計 (11)	北 東 ア シ ア (12)	東 南 ア シ ア (13)	南 西 ア シ ア (14)	中 国 (15)					
(1)	全 業 業	637	57.5	32.3	71.7	27.9	46.9	7.4	27.8	12.2	7.1	14.6	5.5	3.3
(2)	制 造 業	413	59.4	36.8	67.7	26.6	42.4	6.3	23.9	9.3	4.1	12.6	3.6	1.1
(3)	製 造 業 中	199	55.0	23.9	68.8	20.3	44.0	1.8	22.9	10.1	4.6	16.3	5.3	1.8
(4)	加 工 製 業 中	206	67.0	47.6	68.0	28.6	40.3	10.2	23.8	8.7	5.8	13.6	4.4	2.9
(5)	そ の 他 業 業	128	50.8	30.5	64.4	28.9	44.5	3.9	25.0	9.4	0.8	7.8	0.8	7.8
(6)	全 業 業	194	53.1	22.2	80.9	30.9	57.2	9.8	36.6	19.1	13.9	19.1	9.8	2.1

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Total number of firms entered
8. United States and Canada
9. Europe (excluding the Communist bloc)
10. Asia
11. Subtotal
12. Northeast Asia
13. Southeast Asia
14. Southwest Asia
15. China
16. Pacific Ocean area
17. Middle East
18. Latin America
19. Africa
20. Miscellaneous

Table 33. Reasons for Carrying Out Direct Investment Overseas

	記入会社数 (7)	相手国市場への拡大 (8)	第3国市場への拡大 (9)	現地資源の確保 (10)	現地労働力の有用性 (11)	現地の生産設備の増強 (12)	工場立地 (13)	技術的優越性 (14)	輸出の安定性 (15)	輸入の安定性 (16)	その他 (17)
(1) 全産業	630	78.6	24.4	18.3	14.9	12.2	2.1	9.3	2.4	16.7	7.0
(2) 製造業	418	78.4	23.2	17.7	16.1	13.2	2.3	8.9	2.7	21.1	5.2
(3) 原料・燃料工業	108	82.0	21.3	34.3	16.7	17.6	4.6	13.9	-	12.0	3.7
(4) 加工工業	206	85.4	28.6	2.4	15.5	11.7	1.9	4.9	4.9	31.1	4.9
(5) その他製造業	126	81.0	15.9	28.6	16.7	11.9	0.8	11.1	1.6	12.7	7.1
(6) 非製造業	190	78.9	27.4	14.5	12.1	10.0	1.6	11.1	1.6	6.3	11.1

## Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Total number of firms entered
8. To expand market outlets in partner country markets
9. To expand market outlets in third country markets
10. Local raw materials and resources can be guaranteed
11. Local labor market is useful
12. Local production is worthwhile because of preferential treatment policy
13. Plant site factors are favorable
14. Merit in the area of technical cooperation
15. Avoid instability of export profits
16. Exports had become difficult because of import restrictions
17. Miscellaneous



Table 34. Problems When Considering Direct Investment Overseas

	記 入 社 数 計 (7)	定 率 の 懸 念 の 有 無 (8)	(9) 現地で円滑な経済活動への懸念					人 事 等 (15)	為 替 的 (16)	そ の 他 (17)
			小 計 (10)	賃 金 行 (11)	買 手 の 買 断 力 強 (12)	税 制 的 制 約 (13)	下 請 関 係 者 (14)			
(1) 全 産 業	678	61.4	90.5	34.0	55.8	31.2	19.1	50.1	28.0	4.7
(2) 製 造 業	478	58.8	91.8	38.3	61.9	28.2	20.1	47.9	25.1	4.2
(3) 農 林 業 漁 業	123	68.3	92.7	37.4	60.2	30.9	10.6	41.5	31.7	3.7
(4) 加 工 製 造 業	215	54.0	94.9	39.5	62.3	30.2	28.4	50.2	19.1	1.9
(5) その他製造業	140	57.9	86.4	37.1	62.9	22.9	15.7	50.0	28.6	6.1
(6) 非 製 造 業	198	67.7	87.4	23.7	40.9	38.4	16.7	55.6	34.8	6.1

Key:

1. All industries
2. Manufacturing industries
3. Raw materials industries
4. Processing industries
5. Other manufacturing industries
6. Nonmanufacturing industries
7. Total number of firms entered
8. Fear of political instability and nationalization
9. Concern over smooth economic activity in local area in partner country
10. Subtotal
11. Labor-management practices
12. Guarantee of good labor force
13. Constraints of the tax system, etc.
14. Production relationships, such as subcontractors
15. Personnel matters of employees assigned overseas
16. Exchange rate fluctuations
17. Miscellaneous

12259

CSO: 8129/1640

## ECONOMIC

### HIGHER IMPORT OF OIL, COAL URGED

OW021323 Tokyo KYODO in English 1239 GMT 2 Aug 85

[Text] Tokyo, 2 Aug (KYODO)--Japan-China talks this fall for review of their long-term trade agreement are in for rough sailing in view of the certainty of Beijing demands for increased imports of crude oil and coal, government sources said Friday.

Under the trade agreement governing Japan's imports of crude oil and coal, the amounts and prices of annual imports have been reviewed each year, except 1980, since the agreement was concluded in 1978.

At this year's talks in Tokyo, China is believed certain to call for increased imports as a means of reducing its huge trade deficit with Japan.

But Japan will find it difficult to comply because of slack domestic demand, the sources said.

At the bilateral ministerial talks held in Tokyo 30-31 July, Gu Mu, head of the Chinese delegation, strongly called for expansion of long-term trade to rectify China's trade deficit with Japan, which he said amounted to 2.3 billion dollars in the first half of this year.

The review talks scheduled for this fall are designed to fix a general framework for Japanese coal and oil imports over the next five years, and amounts and prices for the next year, the sources said.

Indications are that China is placing great importance on the talks in the context of its seventh five-year economic plan starting next year. Crude oil is China's main foreign exchange earner.

However, Japan finds it hard to boost oil imports because of electric power firms' growing reliance on atomic power generation and higher prices than those for oil in the spot market.

This is also true of coal. Moreover, Japan faces demands for increased coal imports from the United States and Australia as well.

Through its working-level contacts with China, therefore, Japan is seeking to reach a compromise formula on the basis of plans suggested by Japanese quarters concerned.

Among these suggestions are a switch to year-by-year contracts, flexible adjustment to market prices and flexible imports under import targets instead of the mandatory quota system.

Japan's crude oil imports from China rose from seven million tons in 1978 to 8.3 million tons in 1981 and 1982. Since 1983, the annual amount has ranged from eight million to 8.6 million tons.

As for coal, Japan annually boosted imports from 1978 to 1983--from 150,000 tons each of coking and steam coal in 1978 to two million tons of coking coal and 2.5 million tons of steam coal in 1983.

But annual imports have declined from 1984 owing to slack domestic demand, with contracted imports for this year standing at 1.3 to 1.5 million tons of coking coal and 2.3 to 2.5 million tons of steam coal.

CSO: 4100/701

END

**END OF**

**FICHE**

**DATE FILMED**

September 26, 1985